

PROSTHETIC HEART VALVE

Abstract of the Disclosure

5 A tubular prosthetic semilunar or atrioventricular heart valve is formed by cutting flat, flexible leaflets according to a pattern. The valve is constructed by aligning the side edges of adjacent leaflets so that the leaflet inner faces engage each other, and then suturing the leaflets together with successive stitches along a fold line adjacent the side edges. The stitches are placed successively from a proximal in-flow end of each leaflet toward a distal out-flow end. During operation, when the leaflets open and close, the leaflets fold along the fold line. Distal tabs extend beyond the distal end of each leaflet. The successive stitches terminate proximal of the distal tab portion so that no locked stitches are placed along the distal portion of the fold line. The tab portions of adjacent leaflets are folded over each other and sewn together to form commissural attachment tabs. The commissural tabs provide commissural attachment points to accommodate sutures and the like in order to secure the tab to a vessel wall, if a semilunar valve, and papillary muscles and/or chordae tendineae if an atrioventricular valve.

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